



**Air Quality Permitting
Statement of Basis**

June 12, 2006

Tier I Operating Permit No. T1-030033

**Boise Compressor Station
Northwest Pipeline Corporation
Williams Gas Pipeline**

Facility ID No. 001-00094

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FINAL

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Acronyms, Units, and Chemical Nomenclature

40 CFR 60.330	NSPS Subpart GG: Standards of Performance for Stationary Gas Turbines
AFS	AIRS Facility Subsystem
AIRS	Aerometric Information Retrieval System
AQCR	Air Quality Control Region
Btu	British thermal unit
CAM	Compliance Assurance Monitoring
CFR	Code of Federal Regulations
CO	carbon monoxide
DEQ	Department of Environmental Quality
dscf	dry standard cubic foot
EL	Emission Limit
EPA	U.S. Environmental Protection Agency
FIRE	Factor Information Retrieval
gr	grain (1 lb = 7,000 grains)
gr/dscf	grains per dry standard cubic foot
HAPs	hazardous air pollutants
hp	horsepower
IDAPA	a numbering designation for all administrative rules in Idaho promulgated in accordance with the Idaho Administrative Procedures Act
km	kilometer
lb/hr	pound per hour
MACT	Maximum Achievable Control Technology
MMBtu	million British thermal units
MMscf	million standard cubic feet
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO _x	nitrogen oxides
NSPS	New Source Performance Standards; 40 CFR 60
PM	particulate matter
PM ₁₀	particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers
PSD	Prevention of Significant Deterioration
PTC	permit to construct
scfh	standard cubic feet per hour
scfy	standard cubic feet per year
SIC	Standard Industrial Classification
SO ₂	sulfur dioxide
Subpart GG	Subpart GG to NSPS: Standards of Performance for Stationary Gas Turbines; 40 CFR 60.330 thru .335
T/yr	tons per any consecutive 12-month period
VOC	volatile organic compound

1. PURPOSE

The purpose of this memorandum is to explain the legal and factual basis for this draft Tier I operating permit, as required by IDAPA 58.01.01.362 – Technical Memorandums for Tier I Operating Permits.

2. FACILITY DESCRIPTION

The Boise Compressor Station operates remotely from the NWP headquarters in Salt Lake City, and is used to transmit natural gas along the transmission pipeline. The station is operated to meet the demand of the pipeline system rather than operating on a fixed schedule. The arrangement of pipes and valves in the Boise pipe yard allows natural gas to be transmitted in either direction of the pipeline.

Natural gas entering the station passes through two in-line filters (one for each turbine) that remove any impurities from the gas stream. The natural gas is compressed through the compressor and is returned to the transmission pipeline. Fuel for the turbines and other natural gas combustion equipment enters the station in separate piping that originates in the pipe yard. Fuel gas is lowered from mainline pressures to pressures appropriate for the turbines in the compressor building. From the fuel skid, the natural gas is piped to the turbines, boiler, space heaters, and backup generator. The turbines, boiler, and backup generator each have their own exhaust stacks.

3. FACILITY/AREA CLASSIFICATION

This facility is classified as a major facility in accordance with IDAPA 58.01.01.008.10 because it emits or has the potential to emit a regulated criteria air pollutant in amounts greater than or equal to 100 T/yr. The facility is not a major facility in accordance with IDAPA 58.01.01.008.10 for hazardous air pollutant emissions because the facility does not emit or have the potential to emit a regulated hazardous air pollutant or pollutants in amounts greater than or equal to 10 T/yr or 25 T/yr, respectively. The facility is a major facility as defined by IDAPA 58.01.01.205 because it has the potential to emit a regulated NSR pollutant in amounts greater than 250 T/yr. The facility is not a designated facility as defined by IDAPA 58.01.01.006.27. The AIRS/AFS facility classification is A. The AIRS information provided in Appendix A defines the classification for each regulated air pollutant at the facility.

The facility is located just outside of Boise, Idaho in Ada County, which is located in Air Quality Control Region (AQCR) No. 64, Zone 11. This area is unclassifiable for all federal and state criteria pollutants. There are no Class 1 areas within 10 km of the facility.

The SIC defining the facility is 4922, *Natural Gas Transmission*.

This facility is subject to the New Source Performance Standard (NSPS) of 40 CFR 60.330 thru 60.335 – Subpart GG, Standards of Performance for Stationary Gas Turbines.

The facility is not subject to any of the following federal requirements:

- 40 CFR 61 National Emissions Standards for Hazardous Air Pollutants (NESHAP)
- 40 CFR 63 Maximum Available Control Technology (MACT)
- 40 CFR 64 Compliance Assurance Monitoring (CAM).

4. APPLICATION SCOPE

This permitting action is the renewal of the existing facility's existing Tier I operating permit. Permit condition updates and amendments as a consequence of the renewal are listed in Section 6 – *Permit Conditions* – of this memorandum.

4.1 Application Chronology

June 25, 2003	DEQ receives the permit renewal application
August 6, 2003	DEQ determines application complete
September 15, 2005	DEQ provides draft permit for facility and regional office review
November 28, 2005	DEQ provides draft permit for public comment
December 8, 2005	
Through January 6, 2006	Public comment period
March 27, 2006	DEQ provides proposed permit to EPA for its review

5. PERMIT ANALYSIS

5.1 Emissions Inventory

Emissions have not increased during the term of the facility's existing Tier I operating permit. The facility submitted an emissions inventory with its renewal application that shows emissions have not increased. The emissions inventory is provided as Appendix B. Note, the emissions inventory indicates the potential to emit NO_x for both compressors is less than 250 T/yr; however, the allowable NO_x emissions are greater than 250 T/yr. Therefore, the facility classification is major in terms of applicability to IDAPA 58.01.01.205.

5.2 Regulatory Review

This section describes the regulatory analysis of the applicable air quality rules with respect to this permit.

40 CFR 60, Subpart GG Standards of Performance Stationary Gas Turbines

This New Source Performance Standard (NSPS) establishes the requirements for all stationary gas turbines with heat input at peak load equal to or greater than 10.7 gigajoules (10 million Btu) per hour, based on a the lower heating value of the fuel fired, and have commenced construction, modification, or reconstruction after October 3, 1977. Both turbines at Boise Station are subject to the standard, and have already undergone the initial performance test required by the regulation to show compliance with the NO_x ppm standard.

Revisions to NSPS Subpart GG since the last PTC and Tier I permit for Boise Station are incorporated into this permit. The custom fuel monitoring provision used to show compliance with the fuel sulfur content standard of Subpart GG has been replaced.

Subpart GG revisions state that the operator may elect not to monitor the total sulfur content of the gaseous fuel combusted in the turbine, if the gaseous fuel is demonstrated to meet the definition of natural gas in §60.331(u). Northwest Pipeline has opted to demonstrate compliance with the sulfur content provisions according to 40 CFR 60.334(h)(3)(i): "The gas quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract, specifying that the maximum total sulfur

content of the fuel is 20.0 grains/100 scf or less, shall be used to demonstrate compliance with the definition of natural gas.”

FERC Gas Tariff

Northwest Pipeline has submitted the Federal Energy Regulatory Commission (FERC) Gas Tariff to satisfy §60.334(h)(3)(i). The Tariff clearly specifies:

- in Sections 3.1(a) and 3.1(a)(2) that the gas shall contain not more than one quarter grain of hydrogen sulfide per 100 cubic feet and not more than 20 grains total sulfur per 100 cubic feet for all gas delivered by Shipper to Transporter at Receipt Points not connected to the La Plata Facilities; and,
- in Section 3(b) that all gas delivered by Shipper to Transporter at Receipt Points connected to the La Plata Facilities shall contain not more than 0.3 grains of mercaptan sulfur per 100 cubic feet of gas. The gas shall contain not more than 0.75 grains of total sulfur per one hundred cubic feet of gas.

The two subdivisions of La Plata and non La Plata gas constitute 100% of Northwest Pipeline’s natural gas.

The turbines at the facility have satisfied the initial test requirements of Subpart GG and the facilities PTCs; therefore, SO₂ testing requirements are satisfied. This Tier 1 permit renewal addresses revisions to NSPS Subpart GG in Permit Conditions 3.8 and 4.8: replacement turbines shall comply with the NO_x requirements of the subpart; SO₂ testing is no longer required, but replaced with the tariff evidence of natural gas sulfur content.

40 CFR 63 Subpart HHH National Emission Standards for Hazardous Air Pollutants
from Natural Gas Transmission and Storage Facilities

Subpart HHH (§ 63.1270 et. seq.) sets standards for glycol dehydrators at sources which are a major source of HAPs. Boise Station is not a major source of HAPs and does not contain a glycol dehydrator; therefore, the standard does not apply.

40 CFR 63 Subpart YYYY..... National Emission Standards for Hazardous Air Pollutants for
Stationary Combustion Turbines

Subpart YYYY establishes national emission limitations and operating limitations for hazardous air pollutants (HAPs) emissions from stationary combustion turbines located at major sources of HAP emissions, and requirements to demonstrate initial and continuous compliance with the emission and operating limitations. Boise Station is not a major source of HAPs; therefore, the standard does not apply.

6. PERMIT CONDITIONS

6.1 Permit Condition Changes

The following Permit Conditions have been changed with this Tier 1 permit renewal. No PTC Permit Conditions have been changed with this Tier 1 permit.

Permit Section 1: TIER I OPERATING PERMIT SCOPE

Regulated Sources

Permit Section 1 was added as a Tier 1 permit format update.

Permit Section 2: FACILITY-WIDE CONDITIONS

Test Methods

Permit Condition 2.11 changed the NO_x test methods to reflect the initial performance requirement of NSPS Subpart GG, and the periodic compliance use of Reference Method 7E for NO_x compliance determination.

Permit Section 3: UNITS 1 & 2, SOLAR TAURUS T-6500 TURBINES

Monitoring and Recordkeeping Requirements

Permit Condition 3.12 changes the basis for NO_x emission estimates and emission limit compliance. The previous Tier 1 permit required hourly fuel use monitoring and emissions calculations based on the highest hourly fuel use applied to turbine emission factors. The new requirements apply the most recent emission test results (in lb/hr or lb/MMBtu) to actual hours of operation or actual fuel use to show compliance with the NO_x emission limits.

Permit Condition 3.14 changes the periodic compliance testing for NO_x from performance based frequency to biennial frequency. The permit condition also serves to differentiate between periodic compliance test methods (Reference Method 7E) and initial performance test methods (NSPS Subpart GG).

Permit Condition 3.15 reflects the change in NSPS Subpart GG requirements for demonstrating fuel sulfur content compliance. Periodic fuel sampling is no longer required; a current tariff sheet now serves as demonstration of compliance (40 CFR 60.334(h)(3)(i)).

Periodic compliance testing requirements for PM, PM₁₀, SO₂, CO, and VOC, established in the January 4, 2001 Tier 1 permit have been removed.

7. PUBLIC COMMENT

Public notice and public comment period, including an opportunity for a hearing, affected states review; and EPA review were provided as required by IDAPA 58.01.01.364 and 366, respectively. The state of Oregon is the affected state.

7.1 Regional Review of Draft Permit

DEQ's Boise Regional Office was provided a draft for review on September 15, 2005 and May 24, 2006. Comments were received May 24, 2006 and incorporated into the permit.

7.2 Facility Review of Draft Permit

The facility was provided a draft for review on September 15, 2005. Comments were received and incorporated into the permit.

7.3 Public Comment

A public comment period was provided as required by IDAPA 58.01.01.364. The public comment period ran from December 8, 2005, through January 6, 2006. No comments were received.

8. FUEL TYPE

The requirement for pipeline quality natural gas to be burned in the turbines satisfies the sulfur standards for NSPS Subpart GG.

9. INSIGNIFICANT ACTIVITIES

Table 5.1 lists the insignificant sources at the Boise Compressor Station. These emission units qualify as insignificant due to the quantity of emissions or to the source being specifically listed in IDAPA 58.01.01.317.01(a/b). While there are no monitoring requirements for insignificant emissions units at this facility, these units must comply with all applicable federal, state, and local requirements.

Table 5.1 INSIGNIFICANT ACTIVITIES AND EMISSION UNITS

Description	Insignificant Activities Section Citation IDAPA 58.01.01.317.01
Sellers Model 15 Commador C-60-W Boiler, 2.5 MMBtu/hr	b.i.(5)
Cummins Model GTA 855A Back-up Generator, 310 hp	b.i.(5)
Lubricating Oil Tanks Two tanks at 600 gallons each; One 100 barrel used oil tank.	a.i.(4)
Space Heaters < 5 MMBtu/hr	b.i.(18)
Natural Gas Pipeline and Fuel System	b.i.(30)

Emissions from the lubricating oil system are small amounts of VOC. Emissions from the natural gas pipeline and fuel system are VOC and some HAPs and TAPs. These emissions result from leaking valves, flanges, pressure relief valves, and an annual testing of the emergency shutdown system that includes a facility-wide blowdown. Emissions generated from all other insignificant emissions sources are products of natural gas combustion, which include PM₁₀, SO₂, CO, NO_x, VOCs, and some HAPs and TAPs.

10. REGISTRATION FEES

This facility is a major facility as defined by IDAPA 58.01.01.008.10; therefore, registration and registration fees in accordance with IDAPA 58.01.01.387 apply. The facility is current with its registration fees.

11. RECOMMENDATION

Based on the Tier I application and review of state rules and federal regulation, staff recommends that DEQ issue final Tier I Operating Permit No. T1-030033 to Northwest Pipeline for its Boise compressor station.

CPM/bf

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APPENDIX A

**Boise Compressor Station
Northwest Pipeline Corporation
Williams Gas Pipeline**

T1- 030033

AIRS Table

AIRS/AFS^a FACILITY-WIDE CLASSIFICATION^b DATA ENTRY FORM

Facility Name: Northwest Pipeline Corporation, Boise Compressor Station

Facility Location: Ada County, near Boise; S8, T1S, R4E

AIRS Number: 001-00094

AIR PROGRAM POLLUTANT	SIP	PSD	NSPS (Part 60)	NESHAP (Part 61)	MACT (Part 63)	SM80	TITLE V	AREA CLASSIFICATION A-Attainment U-Unclassified N- Nonattainment
SO ₂	B							U
NO _x	A		A				A	U
CO	B							U
PM ₁₀	B							U
PT (Particulate)	B							U
VOC	B							U
THAP (Total HAPs)	B							U
			APPLICABLE SUBPART					
			GG					

^a Aerometric Information Retrieval System (AIRS) Facility Subsystem (AFS)

^b AIRS/AFS Classification Codes:

A = Actual or potential emissions of a pollutant are above the applicable major source threshold. For HAPs only, class "A" is applied to each pollutant which is at or above the 10 T/yr threshold, or each pollutant that is below the 10 T/yr threshold, but contributes to a plant total in excess of 25 T/yr of all HAPs.

SM = Potential emissions fall below applicable major source thresholds if and only if the source complies with federally enforceable regulations or limitations.

B = Actual and potential emissions below all applicable major source thresholds.

C = Class is unknown.

ND = Major source thresholds are not defined (e.g., radionuclides).

APPENDIX B

**Boise Compressor Station
Northwest Pipeline Corporation
Williams Gas Pipeline**

T1-030033

**Potential to Emit
Source Test Results**

Facility Total Potential to Emit

Pollutant	Unit 1 (T/yr)	Unit 2 (T/yr)	Pipeline & Fuel System	On-site Roads	TOTAL (T/yr)
PM ₁₀	2.23	2.76		0.16	5.16
SO ₂	0.74	0.74			1.47
CO	17.59	17.59			35.18
NO _x	98.55	98.55			197.10
VOC	0.45	0.45	0.49		1.39
Benzene	0.003	0.003			0.01
Ethylbenzene	0.007	0.007			0.01
Formaldehyde	0.152	0.152			0.30
Toluene	0.028	0.028			0.06
Xylenes	0.014	0.014			0.03
Acetaldehyde	0.009	0.009			0.02

Operating Parameters for Units 1 & 2

	Fuel Flow (MMBtu/hour)	Lower Heating Value (Btu/lb)	Heat Content (Btu/ft ³)	Fuel Usage Rate (ft ³ /hour)	Fuel Flow Rate (lbs/hour)	Hours per year
Maximum	48.98	20,612	939	52,162	2,378	8760

Unit 1 PTE

Pollutant	Emission Factor	Units	Emissions (lbs/hr)	(T/yr)	Emission Factor Source
PM ₁₀	0.510	lb/hr	0.51	2.23	September 2001 emission test.
SO ₂	3.43E-03	lb/MMBtu	0.17	0.74	AP-42 Table 3.1-2a; April 2000.
CO	8.20E-02	lb/MMBtu	4.02	17.59	AP-42 Table 3.1-1; April 2000.
NO _x	22.5	lb/hr	22.50	98.55	Manufacturer's Data.
VOC	2.10E-03	lb/MMBtu	0.10	0.45	AP-42 Table 3.1-2a; April 2000.
Benzene	1.20E-05	lb/MMBtu	5.88E-04	0.003	AP-42 Table 3.1-3; April 2000.
Ethylbenzene	3.20E-05	lb/MMBtu	1.57E-03	0.007	AP-42 Table 3.1-3; April 2000.
Formaldehyde	7.10E-04	lb/MMBtu	3.48E-02	0.152	AP-42 Table 3.1-3; April 2000.
Toluene	1.30E-04	lb/MMBtu	6.37E-03	0.028	AP-42 Table 3.1-3; April 2000.
Xylenes	6.40E-05	lb/MMBtu	3.13E-03	0.014	AP-42 Table 3.1-3; April 2000.
Acetaldehyde	4.00E-05	lb/MMBtu	1.98E-03	0.009	AP-42 Table 3.1-3; April 2000.

Unit 2 PTE

Pollutant	Emission Factor	Units	Emissions (lbs/hr)	(T/yr)	Emission Factor Source
PM ₁₀	0.630	lb/hr	0.63	2.76	September 2001 emission test.
SO ₂	3.43E-03	lb/MMBtu	0.17	0.74	AP-42 Table 3.1-2a; April 2000.
CO	8.20E-02	lb/MMBtu	4.02	17.59	AP-42 Table 3.1-1; April 2000.
NO _x	22.5	lb/hr	22.50	98.55	Manufacturer's Data.
VOC	2.10E-03	lb/MMBtu	0.10	0.45	AP-42 Table 3.1-2a; April 2000.
Benzene	1.20E-05	lb/MMBtu	5.88E-04	0.003	AP-42 Table 3.1-3; April 2000.
Ethylbenzene	3.20E-05	lb/MMBtu	1.57E-03	0.007	AP-42 Table 3.1-3; April 2000.
Formaldehyde	7.10E-04	lb/MMBtu	3.48E-02	0.152	AP-42 Table 3.1-3; April 2000.
Toluene	1.30E-04	lb/MMBtu	6.37E-03	0.028	AP-42 Table 3.1-3; April 2000.
Xylenes	6.40E-05	lb/MMBtu	3.13E-03	0.014	AP-42 Table 3.1-3; April 2000.
Acetaldehyde	4.00E-05	lb/MMBtu	1.98E-03	0.009	AP-42 Table 3.1-3; April 2000.

Facility Total Expected Emissions

Pollutant	Unit 1 (T/yr)	Unit 2 (T/yr)	Pipeline & Fuel System	On-site Roads	TOTAL (T/yr)
PM ₁₀	2.23	2.76		0.16	5.16
SO ₂	0.44	0.44			0.88
CO	0.63	0.63			1.26
NO _x	68.39	56.79			125.18
VOC	0.45	0.45	0.49		1.39
Benzene	0.003	0.003			0.01
Ethylbenzene	0.007	0.007			0.01
Formaldehyde	0.152	0.152			0.30
Toluene	0.028	0.028			0.06
Xylenes	0.014	0.014			0.03
Acetaldehyde	0.009	0.009			0.02

Operating Parameters for Units 1 & 2

	Fuel Flow (MMBtu/hour)	Lower Heating Value (Btu/lb)	Heat Content (Btu/ft ³)	Fuel Usage Rate (ft ³ /hour)	Fuel Flow Rate (lbs/hour)	Hours per year
Maximum	48.98	20,612	939	52,162	2,376	8760

Unit 1 Estimated Emissions

Pollutant	Emission Factor	Units	Emissions (lbs/hr)	(T/yr)	Emission Factor Source
PM ₁₀	0.510	lb/hr	0.51	2.23	September 2001 emission test.
SO ₂	0.1	lb/hr	0.10	0.44	January 1993 emission test.
CO	0.143	lb/hr	0.14	0.63	Average of tests 9/02, 9/01, 3/00.
NO _x	15.613	lb/hr	15.61	68.39	Average of tests 9/02, 9/01, 3/00.
VOC	2.10E-03	lb/MMBtu	0.10	0.45	AP-42 Table 3.1-2a; April 2000.
Benzene	1.20E-05	lb/MMBtu	5.88E-04	0.003	AP-42 Table 3.1-3; April 2000.
Ethylbenzene	3.20E-05	lb/MMBtu	1.57E-03	0.007	AP-42 Table 3.1-3; April 2000.
Formaldehyde	7.10E-04	lb/MMBtu	3.48E-02	0.152	AP-42 Table 3.1-3; April 2000.
Toluene	1.30E-04	lb/MMBtu	6.37E-03	0.028	AP-42 Table 3.1-3; April 2000.
Xylenes	6.40E-05	lb/MMBtu	3.13E-03	0.014	AP-42 Table 3.1-3; April 2000.
Acetaldehyde	4.00E-05	lb/MMBtu	1.96E-03	0.009	AP-42 Table 3.1-3; April 2000.

Unit 2 Estimated Emissions

Pollutant	Emission Factor	Units	Emissions (lbs/hr)	(T/yr)	Emission Factor Source
PM ₁₀	0.630	lb/hr	0.63	2.76	September 2001 emission test.
SO ₂	0.1	lb/hr	0.10	0.44	January 1993 emission test.
CO	0.143	lb/hr	0.14	0.63	Average of tests 9/02, 9/01, 3/00.
NO _x	12.967	lb/hr	12.97	56.79	Average of tests 9/02, 9/01, 3/00.
VOC	2.10E-03	lb/MMBtu	0.10	0.45	AP-42 Table 3.1-2a; April 2000.
Benzene	1.20E-05	lb/MMBtu	5.88E-04	0.003	AP-42 Table 3.1-3; April 2000.
Ethylbenzene	3.20E-05	lb/MMBtu	1.57E-03	0.007	AP-42 Table 3.1-3; April 2000.
Formaldehyde	7.10E-04	lb/MMBtu	3.48E-02	0.152	AP-42 Table 3.1-3; April 2000.
Toluene	1.30E-04	lb/MMBtu	6.37E-03	0.028	AP-42 Table 3.1-3; April 2000.
Xylenes	6.40E-05	lb/MMBtu	3.13E-03	0.014	AP-42 Table 3.1-3; April 2000.
Acetaldehyde	4.00E-05	lb/MMBtu	1.96E-03	0.009	AP-42 Table 3.1-3; April 2000.

2006 BOISE COMPRESSOR STATION, NORTHWEST PIPELINE

Boise Compressor Station Emission Tests

Only the results for highest % N₂ are compiled here.

Test Date	Source	Load (%N ₂)	Species	Emission rate	E Rate Units	Emissions (lb/hr)	Emissions (T/yr)
22-Jul-93	Unit 1: Taurus T-7000 [sic]; 7000 hp turbine	100%	NO _x	14.6 lb/hr 88.5 ppm ¹		14.6	63.96
			SO ₂	0.1 lb/hr 0.3 ppm ²		0.1	0.44
	Unit 2: Taurus T-7000 [sic]; 7000 hp turbine	100%	NO _x	14.6 lb/hr 88.2 ppm ¹		14.6	63.51
			SO ₂	0.1 lb/hr 0.4 ppm ²		0.1	0.44
19-Sep-02	Unit 1: Taurus T-6502 [sic]	99%	NO _x	15.77 lb/hr 88.4 ppm ¹		15.77	68.07
			SO ₂	non-detect lb/hr non-detect ppm ²			
			CO	0.08 lb/hr 0.81 ppm ¹		0.08	0.39
			VOC	0 lb/hr 0 ppm		0	0
	Unit 2: Taurus T-6502 [sic]	94%	NO _x	10.77 lb/hr 70.3 ppm ¹		10.77	47.17
			SO ₂	non-detect lb/hr non-detect ppm ²			
			CO	0.19 lb/hr 2.08 ppm ¹		0.19	0.83
			VOC	0 lb/hr 0 ppm		0	0
	Unit 1: Solar Taurus	93%	NO _x	11.7 lb/hr 91.1 ppm ¹		11.7	51.25
			PM (filterable)	0.27 lb/hr 0.0044 gr/dscf		0.27	1.18
			PM (condens.)	0.24 lb/hr 0.0011 gr/dscf		0.24	1.05
			CO	0.29 lb/hr 3.08 ppm ¹		0.29	1.27
17-Sep-01	Unit 2: Solar Taurus	90%	NO _x	11.52 lb/hr 78.6 ppm ¹		11.52	50.48
			PM (filterable)	0.23 lb/hr 0.0038 gr/dscf		0.23	1.01
			PM (condens.)	0.4 lb/hr 0.0016 gr/dscf		0.4	1.75
			CO	0.24 lb/hr 2.44 ppm ¹		0.24	1.05
	Unit 1: Solar Taurus	100%	NO _x	19.37 lb/hr 97.6 ppm ¹		19.37	84.84
			CO	0.06 lb/hr 0.41 ppm ²		0.06	0.22
30-Mar-00	Unit 2: Solar Taurus	100%	NO _x	16.61 lb/hr 88.3 ppm ¹		16.61	72.75
			CO	0 lb/hr 0 ppm ²		0	0.00
	Unit 1: Solar Taurus	100%	NO _x	19.37 lb/hr 97.6 ppm ¹		19.37	84.84
			CO	0.06 lb/hr 0.41 ppm ²		0.06	0.22

¹ 15% O₂ and ISO.

² 15% O₂.

H:\Source Files\Northwest Pipeline\Boise\DEQ_NWP_BoiseEmissionEstimates.xls Source Tests 3/14/2006